WHAT IS CLAIMED IS:

1. A valve cage for use in a control valve, the valve cage comprising:

a sidewall surrounding a bore, the sidewall having an inner surface and an outer surface, the sidewall being contiguously formed;

a plurality of fluid inlets defined on the inner surface of the sidewall;

a plurality of fluid outlets defined on the outer surface of the sidewall; and

a plurality of multidirectional fluid passageways, each of the fluid passageways extending between one of the plurality of fluid inlets and a corresponding one of the plurality of fluid outlets, each fluid passageway defining a multidirectional flow path between the inner surface of the sidewall and the outer surface of the sidewall.

2. The valve cage of claim 1, wherein a first one of the fluid passageways intersects a second one of the fluid passageways.

3. The valve cage of claim 1, wherein at least one of the fluid passageways has a variable cross section.

4. The valve cage of claim 1, wherein each of the fluid passageways includes at least one of an expansion zone and a contraction zone.

5. The valve cage of claim 1, wherein each of the fluid passageways includes both an expansion zone and a contraction zone, and a transition section between the expansion zone and the contraction zone.

6. The valve cage of claim 1, wherein at least some of the fluid inlets have a first cross sectional area and at least some of the fluid outlets have a second cross sectional area different than the first cross sectional area.

7. The valve cage of claim 1, wherein each of the fluid passageways is formed so as to direct the flow path in a first direction having a radial component with respect to a center axis of the valve cage and a second direction having an axial component with respect to the center axis of the valve cage.

8. The valve cage of claim 1, wherein each of the fluid passageways is formed so as to direct the flow path in at least one of a first direction having a radial component with respect to a center axis of the valve cage, a second direction having an axial component with respect to the center axis of the valve cage, and a third direction having a circumferential component with respect to the center axis of the valve cage.

9. The valve cage of claim 1, wherein the sidewall is formed by selective laser sintering.

10. A valve cage for fluid pressure reduction, the valve cage comprising:

a cylindrical housing having an interior surface, an exterior surface, and enclosing an interior chamber, the housing being integrally formed of a single piece of material;

a plurality of first apertures arranged on the interior surface of the housing;

a plurality of second apertures arranged on the exterior surface of the housing; and

a plurality of fluid passages, each of the fluid passages extending between one of the plurality of first apertures and at least one of the plurality of second apertures, each fluid passage defining a tortuous fluid flow path between the interior and the exterior surface of the housing.

11. The valve cage of claim 10, wherein at least one of the fluid passages has a variable cross section.

12. The valve cage of claim 10, wherein at least one of the fluid passages includes at least one of an enlarged region and a narrowed region.

13. The valve cage of claim 10, wherein at least one of the fluid passages includes an enlarged region, a narrowed region, and a transition region extending between the enlarged region and the narrowed region.

14. The valve cage of claim 10, wherein the tortuous fluid flow path is formed in a first direction having a radial component with respect to a central axis of the valve cage and a second direction having an axial component with respect to the central axis of the valve cage.

15. The valve cage of claim 10, wherein the housing is formed by a selective laser sintering manufacturing process.

16. A valve cage comprising:

a housing having an interior surface, an exterior surface, and an interior chamber, the housing being unitarily formed in a single body using a selective laser sintering process;

a plurality of fluid inlets defined on the interior surface of the housing;

a plurality of fluid outlets defined on the exterior surface of the housing; and

a plurality of fluid pathways extending between one of the plurality of fluid inlets and at least one of the plurality of fluid outlets, the fluid pathways being defined by one or more directional changes.

17. The valve cage of claim 16, wherein at least one of the fluid passages has a variable cross section.

18. The valve cage of claim 16, wherein at least one of the fluid pathways is formed in a first direction and a second direction, the first direction having at least one of a radial component, a circumferential component, and an axial component with respect to a longitudinal axis of the valve cage, the second direction having at least one of an axial component, a circumferential component, and a radial component with respect to the longitudinal axis of the valve cage, the first and second directions being different.

19. The valve cage of claim 16, wherein at least one of the fluid pathways includes at least one of an expansion zone and a contraction zone.

20. The valve cage of claim 16, wherein each of the fluid pathways includes an expansion zone, a contraction zone, a transition extending between the expansion zone and the contraction zone.

21. The valve cage of claim 16, wherein each of the fluid pathways is formed in a first direction having a radial component with respect to a central axis of the valve cage and a second direction having an axial component with respect to the central axis of the valve cage.

22. A control valve comprising:

a valve body having an inlet, an outlet, and a flow passage extending between the inlet and the outlet;

a seat ring mounted in the flow passage;

a valve plug shiftably mounted within the valve body for movement between a first position and a second position, the valve plug cooperating with the seat ring to close the flow passage when the valve plug is in the first position;

a valve plug actuator for moving the valve plug between the first position and the second position; and

a tubular valve cage disposed within the valve body and having an end sized to be mounted to the seat ring, the valve cage comprising:

a sidewall having an inner surface and an outer surface and surrounding a bore sized to receive the valve plug, the sidewall being contiguously formed;

a plurality of first apertures defined in the inner surface of the sidewall;

a plurality of second apertures defined in the outer surface of the sidewall; and

a plurality of fluid passages extending between each of the first apertures and at least one of the second apertures, each one of the fluid passages defining a multidirectional flow path between the inner surface and the outer surface of the sidewall, wherein at least one of the fluid passages is disposed in the flow passage when the valve plug is in the second position.

23. The control valve of claim 22, wherein at least one of the multidirectional fluid passages includes at least one of an expansion zone and a contraction zone.

24. The control valve of claim 22, wherein the plurality of first apertures cooperate to define an area, and wherein a progressively greater portion of the area is disposed in the flow passage in response to moving the valve plug away from the first position.

25. The control valve of claim 22, wherein the tubular valve cage is formed by selective laser sintering.